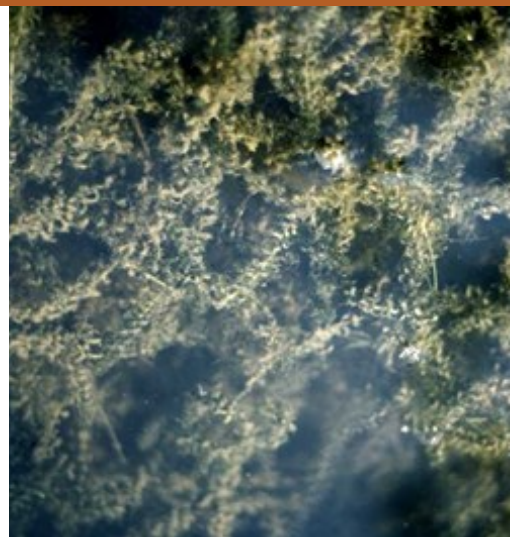
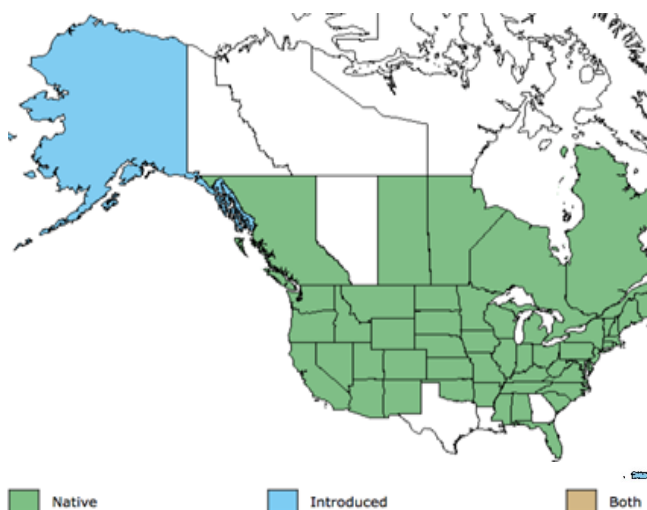


# USACE Invasive Plant Species Best Management Practices

## Canadian Waterweed (*Elodea canadensis*) - Hydrocharitaceae (Frog's Bit)



### Habitat & Life History

Native/nuisance in context – Perennial forb/herb – OBL – Mostly reproduces via stem fragments

### Integrated Management Strategy Selections

#### Prevention

#### Chemical

#### Biological

#### Mechanical

#### Cultural



#### PREVENTION

- Manage nutrient input & composition; Maintain healthy, diverse community of desirable vegetation



#### CHEMICAL CONTROL

- Herbicides—copper sulphate (or chelates of copper), endothall, diquat, flumioxazin, fluridone, penoxsulam
- Use-pattern—water column
- \*Refer to product label for specific instructions on rate & use-pattern



#### BIOLOGICAL CONTROL

- Agent—*Ctenopharyngodon idella* (Triploid grass carp); nonselective grazer
- Rearing/release: restricted in some US states; must purchase from certified hatchery



#### MECHANICAL CONTROL

- Hand pull, aquatic weed rake, seine, remove floating fragments
- Weed rollers, harvester



#### CULTURAL CONTROL

- Drawdown, dyes, shading, benthic barriers, competition with other natives may reduce growth



#### MANAGEMENT SEQUENCING

- Timing of control methods—best option is to apply chemical control early in growing season (~April to May)
- Monitoring—closely monitor for any regrowth and re-apply herbicides if necessary
- Niche-filling/Restoration—restore treated areas with competitive native vegetation



#### COMMENTS

- Infestations are usually associated with excess nutrients and the release of fragments during mechanical management; Canadian waterweed is commonly confused with genera *Egeria* and *Hydrilla*

